

# THE UNITED SHAMES OF AMIERICAL

TO ALL TO WHOM THESE PRESENTS SHALL COMES

# Ardie G. Gustafson, Seedsman

Withereas, there has been presented to the

## Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF ACCURACY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT TY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PEA

'Granada'

In Lestimony Minercot, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 20th day of April in the year of our Lord one thousand nine hundred and seventy-eight

Altost:

Acting
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

FORM APPROVED OMB NO. 40-R3712

# APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

ISTRUCTIONS: See Reverse.  VARIETY NAME OR TEMPORARY DESIGNATION	2. KIND NAME	ţ.	PV NUMBER	AL USE ONLY
DESIGNATION  GRANADA	Peas	<u> </u>	78000	
GRANADA  I. GENUS AND SPECIES NAME	4. FAMILY NAME (Bota	nical)	1-3-78	10:00 A.M
	Leguminosa	e	FEE RECEIVED	BALANCE DUE
Pisum Sativum	S. DATE OF DETERMIN		\$250.00	5 <u>/-3-78</u>
			250.00	\$ <del>1-3-78</del>
	7. ADDRESS (Street and	INO. OF U.F.	\$ 2.50.00 City, State, and ZIP	S. TELEPHONE AREA
S. NAME OF APPLICANT(S)	7. ADDRESS (Street and Code)	J. K.P.D. Nou (	, <b>21</b> 5	CODE AND NUMBER
Ardie G. Gustafson	4th and D			208/743-6261
Seedsman	P. O. Box	85 <b>5</b>		
•		Idaho 83501		11
9. IF THE NAMED APPLICANT IS NOT A P	P. Association, etc.)	10. STATE OF INCOR	RPORATION	11. DATE OF INCOR-
ORGANIZATION: (Composation, partnersni	ip, association, ecc.	<b>.</b>		
12. Name and mailing address of appl	licant representativele	), if any, to serve	in this application a	and receive all papers
·				
Ardie G. Gustafson, S	3eedsman			
4th & D Street				
P.O. Box 855				
Lewiston, Idaho 83501	T			
	CHUENT CHRMITTED.			
13. CHECK BOX BELOW FOR EACH ATTA	reeding History of the	Variety (See Section	on 52 of the Plant V	artety Protection Act.
	•	·		•
X 138. Exhibit B, Botanical De	escription of the Variet	-1		
X 13c. Exhibit C, Objective De	escription of the Variet	y		
X 13D. Exhibit D, Data Indicati		-		
X 13E. Exhibit E, Statement of	the Basis of Applicant	t's Ownership		
144 Does the applicant(s) specify t	that seed of this variet	y be sold by variet	ty name only as a ch	lass of certified seed?
(See Section 83(a), (I) "Yes,"	answer 14B and 14C o	Jelow.j		
148. Does the applicant(s) specify t	that this variety be	beyond bree	der seed?	nerations of production
limited as to number of general	tions?			ED CERTIFIE
The applicant declares that a viabl	la comple of basic see	d of this variety w	vill be deposited upor	on request before issu-
and of a corrificate and will be re	eplenished periodically	y in accordance wit	th such regulations a	as may be approach
and 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	this savually reproduce	ed novel plant vari-	iety believes that the	e variety is assumes,
The undersigned applicant(s) of t uniform, and stable as required in	'n Section 41 and is en	titled to protection	under the provision	is of Section 42 of the
Plant Variety Protection Act.				
Applicant is informed that false s	representation herein c	an jeopardize prot	tection and result in	penalties.
1 ./ -	<b>'</b> O	(1.2	47 X1. +	· Kom.
Jan 16,197	<u>8</u>	wall,	SIGNATURE OF APPLIE	MANT)
(DATE)			SUNNATURE OF APPLI	1 T
$\bigvee$			<i></i>	, <u> </u>
(DATE)			SIGNATURE OF APPLI	'CANT)

#### INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and \$250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, 6525 Belcrest Road, Hyattsville, Maryland 20782. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

#### ILEW

- Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.
- Tirst, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, prostate evidence on stability.
- the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the
  mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.
- 13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.
- 13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.
- 13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

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#### EXHIBIT A

#### Origin and Breeding History of the Variety

- 1. Granada originated in Idaho from crosses of W.S.U. 691008 (PI244113 and Scout). This cross was then used as the male parent and crossed with Hustler (AG 311F), a very early cultivar. These crosses were made in the winter of 1960-70 and the summer of 1970.
- W.S.U. 691008 was tested by Dr. W. A. Haglund, Plant Pathologist, Northwest Washington Research and Extension Unit, Mt. Vernon, Washington. Tests proved that the cross was resistant to Race 5 Fusarium wilt. Dr. Haglund released the cross for breeding material. The first cross was made in the growth chamber at Lewiston, Idaho. The second cross was made in an increase plot at Pullman, Washington.
- 2. Single plant selections were made in 1972 in the F4 generation. Work by Dr. Fred Muehlbauer, Research Geneticist, U.S.D.A. Washington State University proved the cross was resistant to Race I Fusarium wilt. Further testing in Mt. Vernon, Washington, by Dr. W. A. Haglund, resulted in the material being resistant to both Race 5 and Race 6 Fusarium wilt.
- 3. The probability of a Rogue type is one in 10,000. Genetically the cultivar was stabalized in the F4 generation.

### 7800017

#### EXHIBIT B

#### Botanical Description of the Variety

- 1. Granada is a Early Perfection type freezer pea. Maturity being three days earlier than Scout.
- 2. The variety is a Perfection type vine, internodes zigzag, stiff straw, with a heighth of twenty five to twenty eight inches. Node color is green internode. Length being about two to two and one half C.M. First inflorescence being on the tenth node. Leaflets are paired two or more, medium wax. Stipules are marbled, waxed, very dark green and non clasping. Flowers are white with greenish venation, bearing mostly doubles. Seeds being wrinkled with yellow cotyledons.

Granada most closely resembles Scout. It differs, by maturing 2-3 days earlier. The vine being slightly shorter with longer internodes.

FORM GR-470-14 (5-15-74)

### UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE GRAIN DIVISION

(Pca)

HYATTSVILLE, MARYLAND 20782  OBJECTIVE DESCRIPTION OF VARI	ETY
Ardie G. Gustafson PEA (PISUM SATIVUM) NAME OF APPLICANTIS)	VARIETY NAME OR TEMPORARY
4th & D Street Box 855	DESIGNATION
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)	'GRANADA'
Lewiston, Idaho 83501	FOR OFFICIAL USE ONLY
	PVPO NUMBER 7800017
Place the control of t	7800017
Place the appropriate number that describes the varietal character in the boxes belo Place a zero in first box (e.s. 0 8 9 or 0 9 ) when number is either 99 or less	s or 9 or less.
1. TYPE:	
1 - GARDEN 2 - FIELD 3 - EDIBLE-PODDED	
2. MATURITY:	
1 0 Node number of first bloom: 6 2 No. of days to processing	y 1 2 6 5 Heat Units
4 No. of days Earlier than 2 1 = ALASKA WR 2 = THOM	IAS LAXTON WR 3 = LITTLE MARVEL
4 No. of days Later than	WR 6 = AUSTRIAN WINTER
3. PLANT HEIGHT:	· · · · · · · · · · · · · · · · · · ·
4 7 CM, HIGH	
	IAS LAXTON WR 3 = LITTLE MARVEL
$0  9  \text{Cm. Taller than}  .  .  .  \boxed{3}  4 = \text{WANDO}  5 = \text{ALDERMAN}$	WR 6 = AUSTRIAN WINTER
4. VINE:	
	1 = SLIM (Alaska) 3 = HEAVY (Alderman) 2 = MEDIUM (Thomas Laxton WR)
Branching: 1 = NONE (Alaska) 2 - 1-2 BRANCHES (Little Marvel) 3 = MO	RE THAN 2 BRANCHES (Dwarf Gray Sugar
	OF NODES
5. LEAFLETS:	
1 = LIGHT GREEN (Alaska WR) 2 = MED. GREEN (Thomas Laxton W Color: 4 = OTHER (Specify)	R) 3 = DARK GREEN (Alderman)
3 Wax: 1 = NONE 2 = LIGHT 3 = MEDIUM 4 = HEAVY 2 1 = NOT MAR	RBLED 2 = MARBLED (Alaska)
	THREE OR MORE
6. STIPULES:	
2 1 = LACKING 2 = PRESENT 1 = NOT CLAS	SPING 2 = CLASPING
2 1 = NOT MARBLED 2 = MARBLED 3 Size (Compared	d with leaflets): 1 = SMALLER 2 = SAME 3 = LARGER
Color (Compared with leaflets): 1 = LIGHTER 2 = SAME 3 = DARKER	
7. FLOWER COLOR:	· · · · · · · · · · · · · · · · · · ·
2 VENATION 1 STANDARD 1 WING KEEL $\begin{cases} 1 = 0 \\ 4 = 0 \end{cases}$	NHITE 2 = GREENISH 3 = LAVENDER PURPLE 5 = RED DTHER (Specify)

8. P				
1	1 = STRAIC Shape: 3 = CURVE		End: 1 = POINTED (Alderman	) 2 = BLUNT (Alaska)
3	1 = .	GREEN (Alaska WR) 2 = MEDIU (Specify)	M GREEN 3 = DARK GREEN (Alderm	en)
1	Surface: 1 = SMO	OOTH 2 = ROUGH	2 Surface: 1 = SHINY 2:	= DULL
2		GLE 2 = DOUBLE 3 = SIN JBLE & TRIPLE 6 = TRIPLE	GLE AND DOUBLE 4 = SINGLE, DOU 7 = OTHER (Specify)	JBLE, & TRIPEE
0	8 CM. LENGTH	[	1 5 MM. WIDTH (Between sutures)	0 6 NO. SEEDS PER POD
9. S	EEDS (95-100 Tenderome	ter):		
3	Color: 1 = L	LIGHT GREEN 2 = GREEN 3	3 = DARK GREEN 4 = OTHER (Specify)	
10	ve: % 11 1	2 8 2 5	5 6 7 8 3 0 3 4 I	AVERAGE  4 8 x3 7/-7 1/13/77
	,,			
$\sqrt{2}$	Shape: 1 ≠ FLAT	TTENED 2 = ANGULAR 3	= OVAL 4 = ROUNDED	
~ [3	Surface: 1 * SMOC 3 * WRIN	OTH 2 - DIMPLED	Surface: 1 = SHINY 2	? = DULL
	Color Pattern:	1 = MONOCOLOR 2 = MOTTLE	D 3 = STRIPED 4 = DOTTED	
0 2	Primary Color:	1 = CREAMY-WHITE 2 = CREA 5 = DARK GREEN 6 = BLUE-C	AM & GREEN 3 = LIGHT GREEN 4 = GREEN 7 = YELLOW 8 = BROWN	= MEDIUM GREEN 9 = RED
0 3	<del>-</del>	10 = GRAY 11 = BLACK		•
2	Hilum Floor Color:	1 = WHITE 2 = TAN 3 = BLACK	Cotyledon Color: 1 = GREEN	1 2 = YELLOW 3 = ORANGE
/ 2	GRAMS PER 100	SEEDS		
10.	DIREASE: (0 = Not Tested	; 1 = Susceptible; 2 = Resistant)		
2	FUSARIUM WILT	•	0 NEAR-WILT	O DOWNY MILDEW
	ASCOCHYTA BLIGH	ıT ·	1 POWDERY MILDEW	0 BACTERIAL BLIGHT
1	MOSAIC		1 PEA ENATION MOSAIC	O YELLOW BEAN MOSAIC
	OTHER (Specify)	Resistant to Race 1 -	<b>5 -</b> 6 Fusarium wilt	
11.	INSECT: (O= Not Tested;	1 = Susceptible; 2 = Resistant)		· ——
0	APHIDS		OTHER (Specify)	
12.		TY MOST CLOSELY RESEMBLES	THAT SUBMITTED	()
	CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
	<u>Leafiness</u>	Scout	Fresh Seed Color	Scout
<del></del>	Leaf Color	Scout   Scout	Mature Seed Color	Scout
	Pod Color	Scout	Seed Shape	Scout
	Pod Shape	<u> </u>	Plant Habit	Scout

## 7800017

#### EXHIBIT D

#### Data Indicitive of Novelty

Novelty is based on the following characters

Granada most closely resembeles Scout, but differs by maturing three days earlier than Scout. Granada is also resistant to Race 5 and Race 6 Fusarium wilt.

## 7800017

#### EXHIBIT E

Statement of Applicants Ownership

Ardie G. Gustafson, Seedsman of Lewiston, Idaho, believes he is the sole, original and first breeder of Granada variety of pea seed for which he solicits a certificate of protection.